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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,945	12/29/2000	Jiandong Huang	256.078US1	7950
128 7590 12/28/2006 HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245			EXAMINER LIN, KENNY S	
			ART UNIT 2152	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
2 MONTHS		12/28/2006	PAPER	

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**Technology Center 2100**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/751,945  
Filing Date: December 29, 2000  
Appellant(s): HUANG ET AL.

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Dahl, John M.  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 10/2/2006 appealing from the Office action mailed 6/25/2003.

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**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

Claims 1-33 are pending in the present application, and stand under Final Rejection.

Claims 1-33 are rejected under 25 USC 112 as failing to teach how to make or use the invention.

Claims 1-2, 4, 12-13, 15, 23-24 and 26 are rejected under 35 U.S.C. 102 (e) as being anticipated by Bruck et al. (U.S. Patent No. 6,088,330)

Claims 3, 14 and 25 are rejected under 35 U.S.C 103(a) as being unpatentable over Bruck et al. (U.S. Patent No. 6,088,330)

Claims 5-11, 16-22 and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brock et al., in view of Okanoue et al. (U.S. Patent No. 5,925,137)

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

Claims 1-2, 4, 12-13, 15, 23-24 and 26 are rejected under 35 U.S.C. 102 (e) as being anticipated by Bruck et al. (U.S. Patent No. 6,088,330)

Claims 3, 14 and 25 are rejected under 35 U.S.C 103(a) as being unpatentable over Bruck et al. (U.S. Patent No. 6,088,330)

Claims 5-11, 16-22 and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brock et al., in view of Okanoué et al. (U.S. Patent No. 5,925,137)

**WITHDRAWN REJECTIONS**

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. The 35 U.S.C 112 first paragraph rejection has been withdrawn.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,088,330	Bruck et al.	7-2000
5,925,137	Okanoue et al.	7-1999

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1, 2, 4 12, 13, 15, 23, 24 and 26 are rejected under 35 U.S. C. 102(e) as being anticipated by Bruck et al. (US 6,088,330).
2. As to claims 1, 12 and 23, Bruck disclosed a reliable distributed computing system for managing the state of a computer network comprising fault-tolerant network nodes, comprising:
  - a. Determining in each fault-tolerant node the state of a first link between each of the fault-tolerant nodes and other network nodes (col.11, lines 9-19, 35-36);
  - b. Determining in each fault-tolerant node the state of a second link between each of the fault-tolerant nodes and other network nodes (col.11, lines 9-19, 35-36);
  - c. Receiving data from an originating node in a first fault-tolerant intermediate node (col.11, lines 60-61); and
  - d. Selecting in the first fault-tolerant intermediate node either the first link or the second link from the first fault-tolerant intermediate node to a destination node for sending data, wherein the first link and second link comprise links other than directly to the originating node, such that the link is selected based on the network states determined independently for each fault-tolerant node (col.2, lines 19-20, col.14, lines 3-10, claims 1-4).
3. As per claims 2, 13 and 24, wherein the destination node is a fault-tolerant intermediate node (fig.1: 100).
4. As per claims 4, 15 and 26, the first fault-tolerant intermediate node is a switch (fig.1: 110).

5. Claims 3, 14 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruck et al. (U.S. 6,088,330).

6. As per claims 3, 14 and 25, Bruck discloses the invention substantially as claimed in claims 1, 12 and 23, but fails to include a non-fault tolerant node. However, the claimed non-fault-tolerant node, in light of the specification, is a single link node, and as admitted in the applicant's background of invention that the non-fault tolerant node was included in the network; prior to the invention was made (see background of invention).

7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a non-fault tolerant node with Bruck's reliable network to enhance reliability of a conventional single link node. The motivation of doing so would have been obvious that to allow the non-fault tolerant node to take advantage from the reliable network and improving efficiency of the network as a whole.

8. Claims 5-11, 16-22 and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruck et al (U.S. 6,088,330), in view of Okanou et al. (U.S. 5,925,137).

9. As per claims 5-11, 16-22 and 27-33, Brock discloses the invention substantially as claimed in claims 1, 12 and 23, but fails to teach link state table including link status, diagnostic status, data representing routing to other node, status of ability of sending, receiving data.

10. However, in an analogous art, Okanou teaches a method and system for routing management, which comprises health check feature for diagnosis the network

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indicate the link status in the table (e.g., active node, link etc.), the teaching related to link status (e.g., active status), implies the ability of sending and receiving data of the associated nodes (abstract; col.1, lines 55-67, col.2, lines 35-54). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Okanou link state table with Bruck to enable each of the node to alter communication path as needed, thereby, improving fault-tolerant efficiency.

#### **(10) Response to Argument**

The examiner summarizes the various points raised by the appellant and addresses replies individually.

As per appellant's argument that:

(1) Whether Claims 1-33 were rejected under 35 U.S.C. 112 as failing to teach how to make or use the invention.

In reply to argument (1), appellant's explanation of first link and second link which are comprised of links that connects intermediate nodes from the originating node to the destination node is persuasive. Examiner hereby withdraws the 35 U.S.C. 112 first paragraph rejection.

(2) Bruck does not teach the to determine in each fault tolerant node the state of a first link or second link.

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In reply to argument (2), Bruck disclosed each of the nodes in the system to include a NETM that can find information about the system of nodes and determine connection states between the nodes where the NETM process on each node to determine the condition for any given A to B connection state (see Bruck col.11, lines 9-19). Therefore, Bruck evidently disclose to determine the state of links (first link and/or second link) between each of the fault tolerant nodes and other network nodes.

(3) Office Action mailed 6/25/2003 explicitly admit not all element of certain pending claims such as 3, 14 and 25 are presented in Bruck.

In reply to argument (3), although the Office Action paragraph 11 stated that claims 3, 14 and 25 are rejected under 35 U.S.C. 102(e), it was clearly a typographical error made by the examiner. The examiner hereby admits to such mistake.

However, such typographical error of does not affect the body of the rejection. By looking at the body of the rejection (paragraph 12 of 6/25/2003 Office Action), one would have easily recognized that it was in fact a 103(a) rejection where a motivation to combine the references is provided. Furthermore, this ground of rejection was never changed. The Non-Final Office Action mailed on 2/26/2003 contains the exact art rejection (word-by-word) regarding claims 3, 14 and 25 with 103(a) rejection heading text.

Last, although the header of the 103(a) rejection regarding claims 3, 14 and 25 was wrongly used, this typographical error could have been easily clarified with a simple telephone



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call or with a response to after-final. If the examiner were to be notified of such mistake, a supplemental office action would have been mailed to remedy this issue.

(4) Okanoué reference discusses only a ring network of devices having network connection lacking a routing protocol, and wherein nodes poll their ring neighbors for link status and maintain the results for links to neighbors only in a table.

In reply to argument (4), in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Bruck reference explicitly disclosed a computer network which determine connection states between nodes. Bruck did not specifically teach to use a status table to store network status data. Examiner simply relied upon Okanoué reference, an analogous art, to teach the use of status table comprising data representing network status (Not Okanoué's teaching of polling neighbor network status, since it is already disclosed by Bruck).

Okanoué teaches a method and system for routing management, which comprises health check feature for diagnosis the network indicate the link status in the table (e.g., active node, link etc.), the teaching related to link status (e.g., active status), implies the ability of sending and receiving data of the associated nodes (abstract; col.1, lines 55-67, col.2, lines 35-54). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

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incorporate Okanou link state table with Bruck to enable each of the node to alter communication path as needed, thereby, improving fault-tolerant efficiency.

Bruck and Okanou in combination disclosed the claimed limitations claimed in claims 5-11, 16-22 and 27-33.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

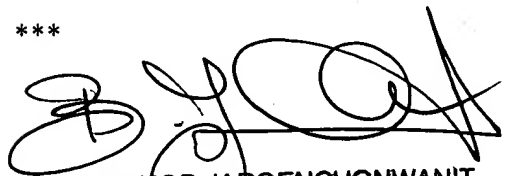
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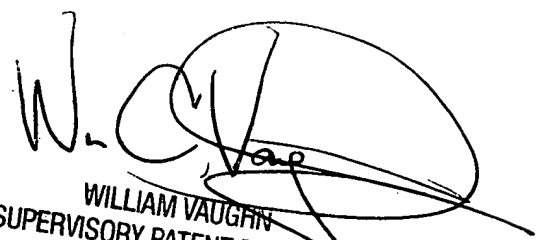
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